(487)

## EVALUATION OF SAMANVIT GRAM VANIKARAN SAMRIDDHI YOJANA (SGVSY) UNDERTAKEN BY D.F.D.A. BULANDSHAHR, UTTAR PRADESH

Sponsored by:

Office of the Chief Conservator of Forests Social Forestry, Uttar Pradesh, Lucknow

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## GRADING OF THE PROJECT FOREST DEVELOPMENT AGENCY (FDA) BULANDSHAHR

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| QUANT   | <b>FITATIVE</b> | PHYS  | ICAL                                | 9    |
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|   |                 | COMPOSITION<br>AND EXECUTIVE THE                          | VE BODIES OF                        | 5    |
|   |                 | ROLE OF<br>ADMINIST<br>SUPERVIS<br>MONITORING M<br>THE PR | TRATIVE,<br>ORY AND<br>IECHANISM OF | 6    |
| FDA ME  | CHANISM         | FLOW OF FUNDS<br>VF                                       |                                     | 6    |
|   |                 | PLANI<br>IMPLEMENT<br>MAINTENANC<br>DIRECTLY B            | ATION AND<br>E OF ASSETS            | 5    |
|   |                 | MEASURES TA<br>CAPACITY B<br>VFCs/                        | UILDING OF                          | 6    |
| Overall   | Outstanding     | Very Good   | Good                                | Poor |
| Grading of the project  | (8-10)          | (5-<8)<br>6.46  | (3-<5)                              | (<)  |

#### **EXECUTIVE SUMMARY**

This report is based on the evaluation of the project work done by FDA Bulandshahr under the SGVSY scheme. The scheme was initiated in the district during 2004-05 and will continue upto 2007-08. The Giri Institute of Development Studies, Lucknow was entrusted the task of conducting the evaluation. In this connection we visited Bulandshahr in December 2006 and carried out the survey in some selected area. The summary of the findings are being presented below.

#### **Project Profile**

- Bulandshahr is located in the western region of the state and lies between 27°N to 28°4 N latitude and 77°E to 78°E longitude. It has a total area of 361748 hectares. The soil is either alkaline or alluvial. Area under forests to total area of the district is barely 2.12 per cent.
- The project was undertaken in 24 villages selected from as many as 10 development blocks and 5 forest ranges.
- > The population of the project area comprised of SC, OBC and general caste. SC accounted for approximately 25.60 per cent of the total population.
- People are mainly dependent on agriculture and animal husbandry. The other occupations are services and working as labourers on a daily wage basis.
- The total project cost sanctioned was Rs.130.70 lakhs upto 2006-07 Rs.111.20 lakhs has been received. The total area covered has been 978.5 hectare. Project work was initiated in 2004-05.

#### Findings of the study

- The project was carried out on an area of 978.5 hectares. The work was carried out under ANR 878.5 hectares and P.D.(100 hectares) only. No activities were undertaken under AR in the district.
- The project duration is from 2004-05 to 2007-08. During 2004-05 only advance work was taken up while creation work was done during 2005-06. After that only maintenance work has been going on.

- ➤ Total amount spent on ANR and PD was Rs.56-28 and Rs.7.38 lakhs respectively EPA, M & E and micro planning involved an expenditure of Rs.25.39 and Rs.6.36 lakhs respectively.
- ➤ The important plant species selected to plantation included Prosopis Juliflora, Khair, Babool, Arjun, Kahtsagaun, Eucalyptus, Papadi etc. On the whole the total number of plants which were planted were 215700.
- Entire project work was done in the forest ranges of Anoopshahr, Bulandshahr, Khurja, Arniya, Debai and Siyana. These ranges are spread over 10 blocks.
- For physical verification 4 JFMC's namely Maan Karaura, Badarkha, Ismailpur Budhena and Bhogpur JFMC's were randomly selected. In all of them only ANR work was conducted over 148 hectares. The average survival rate was around over 90 per cent in Maan Karaura and Badarkha while in Ismailpur Budhena and Bhogpur it was around 70 per cent.
- Micro plans of all the 24 selected villages were prepared using the PRA technique.
- ➤ In all the selected JFMC's Entry Point Activities were undertaken and assets created included construction of hand pumps, deepening of ponds, construction of 'Yatri Sheds', brick soling work, construction of boundary walls, drainage channels etc. A total of the Rs.25.39 lakhs was spent on EPA work.
- As a result of the efforts made by officials from the forest department the level of awareness among people about the significance of maintaing forest cover and their utility has gone up.
- > The FDA as well as the concerned JFMC's have opened bank accounts through which payments under the project have been made.
- > On the whole the quality of work done was found satisfactory during the physical verification.
- > Plantation work was done by using seeds as well as saplings. The average height attained by plants have varied from around 4 to 10 feet.
- > The villages are deriving benefits from the forests by way of fodder and fuel wood.

- The project has so far generated a total employment equivalent to 45543 man days. However, finding daily wage earners at Rs.58 per day, which is the approved rate, was difficult since average daily wages of the district vary between Rs.80-100.
- The DFO office has regularly been sending audited statements to the office of Chief Conservator of forests and from there the statements are sent to the concerned state and central government offices.

#### Project Constraints and Limitation-

- > People of some JFMC's were not very co-operate and did not attend JFMC meetings.
- > Although awareness has gone up, the level has not yet reached the optimal level.
- > The approved wage rate is rather low and so it was difficult to get labourers for the project work.

#### Suggestions and Recommendations

- > The rates approved for getting ANR, AR and P.D. should be brought at par with those approved for similar work under Social Forestry.
- There is a need to increase the rates of daily wages from the existing rate of Rs.58 per day.
- > Due importance has to be given to training which is an important aspect under capacity building.
- > Greater emphasis needs to be given on creation of awareness among the people.

#### **CHAPTER I**

#### PROJECT PROFILE AND PROPOSED ACTIVITIES

#### **INTRODUCTION**

History of development of mankind can be traced along with the gradual destruction of forests through the hands of man. In early ages, man was completely dependent upon the forests for his survival, food and shelter. As in the process of development man cut trees and cleaned forests for farming and housing. As a result of the rapid growth of population and urbanization, forest area declined sharply. Government has serious concern about encroachment on the forest land and decline in the area. Therefore social forestry programme was launched to cover more green land to control environmental pollution.

Uttar Pradesh is India's most populous state with a population of over 166 million. Density of population is 689. The area of the state still continues to be the fifth largest state in India. State had a total literacy rate of 57.36% in 2001 as compared to the national average of 65.38%. The state has various types of soils and topography and a number of rivers flow through this state. The bifurcation of erstwhile U.P. into Uttranchal and Uttar Pradesh, the net forest cover of U.P. has gone down substantially (only 4.46% of geographical area) so it is the most urgent requirement of our state to bring more and more area under forest cover.

The rural people still dependent upon the existing forests and plantations for its forest based needs such as fuel, fodder and small timber. The present of scheme National Afforestation Programme (NAP) has been formulated to provide employment to the local village people through the afforestation programme there by creating valuable forest assets for the village communities and other durable community assets for overall development of the target communities/villages.

In order to strengthen the programme of regeneration of forests and avoid their degradation. The National Afforestation and Eco-Development Board, Ministry of Environment and forest, Government of India initiated the constitution of the District Forest Development Agency in 2000. According by the DFDA, Bulandshahr was registered on 30.12.2000.

#### About the Project

1- PROJECT TITLE: National Afforestation Programme (NAP) through Forest Development Agency Bulandshahar in Utter Pradesh.

#### 2. Project Implementing Agency

FDA : Bulandshahr
District : Bulandshahr
Forest Division : Bulandshahr
Forest Circle : Meerut
State : Uttar Pradesh

3. Project Location(s)

Watersheds - The watershed extends in the whole Forest Division.

Name of Block - Uncha Gaon, Sikarpur, Anoopshahr, Jahangirabad,

Shikarpur, Lakhawri, Khurja Arniya, Debai, Sikandrabad

Forest Ranges - Anoopshahr, Bulandshahr, Khurja Arniya, Debai,

Siyana.

Villages associated - 24

Name of Villages - Ahar, Chakla, Hasanpur, Sirora, Mohamadpur,

Maankarora, Badarkha, Asawari, Riwara, Khakhunda, Khwajpur Domla, Himot, Bichola, Budhena, Ikka Tajpur, Samaspur, Ajmabad, Bhogpan, Nagal, Ramghat, Gokulpur,

Fakana, Sanouter,

#### Project Cost, Duration and Area

Project cost - Rs. 130.70 Lakh

Project duration - 2004-05 to 2007-08

Amount received - 111.20 (from 2004-05 to 2006-07) 100% amount received

upto 2006-07

Project area - 978.50 hect. (100% achieved)

#### A.2. PROJECT PROPOSAL

#### (1) Introduction-

Bulandshahr is situated between Ganga and Jamuna rivers. It is surrounded in the east by Badayun and Moradabad district, in the west by Gautam Budh Nagar, in the north by Meerut and Aligarh lies in the south of it.

It is situated between 27° N to 28° 4 N latitude and 77° E to 78° E longitude. The total area of the district is 361748 hectares. The total forest area of the district is 7675.02 hectares, out of which 6004.43 hectare.areas is reserve forest. The land is either alkaline soil, Khadar or

alluvial. The water is drained into Ganga through its tributaries. Due to long afforestation efforts this alkalinity has reduced considerably. All good alluvial land is under agriculture except alkaline and Khadar areas. All reserve forests in Khurja, Arniya, Bulandshahar and Anoopshahar are saline alkaline soils. The extent of PH varies from 8 to 11. Plantations mainly of Prosopis and Babool have been done in part in these areas. The soil has considerably improved in there areas due to plantations. Khadar areas are low lying pieces of land lying along Ganga. The areas get partly flooded during rains and water recedes after rainy season. The khadar soil is fit for Sheesham and Khair.

Regular cutting or uprooting of these grasses is essential for the success of the plantations of these areas.

The forests of Bulandshahr are of degraded type. They are as follow:

- (i) Northern Dry deciduous forests.
- (ii) Saline Alkaline Khajoor forest.
- (iii) Northern Dry deciduous Khair Sheesham forest.

The climate of the district is more or less dry. During the summer high speed dry winds blow and maximum temperature touches upto 48° C. The average rainfall is 750 mm. per annum. During the winter season temperature fall as low as 4° C.

#### Brief Profile of Bulandshahr

Bulandshahr district has seven Tahsils and covers a total area of 361748 hectare. According to the census 2001 district has a total population of 2923290. Density of population is 786. Qunquenniel average rainfall was 95.6 mm in 2000. Population mainly depends upon agriculture for its livelihood. Land use pattern in the district has been taken from statistical Bulletin 2004 which is given below:

#### Land use pattern (1999-2000) in Ha.

| 1. | Forest Area  | 7675   | 2.12%   |
|----|--|--------|---------|
| 2. | Barren and uncultivable Land   | 8277   | 2.28%   |
| 3. | Cultivable waste   | 5931   | 1.63%   |
| 4. | Land use miscellaneous trees, crops, grooves pasture not included in net area sown | 11277  | 3.11%   |
| 5. | Current fallow land  | 4953   | 1.36%   |
| 6. | Other Fallows  | 6484   | 1.79%   |
| 7. | Net Areas sown   | 283208 | 78.28%  |
|    | Total reporting area for land utilization  | 361748 | 100.00% |
|    | Land put to other uses   | 33943  | 9.43%   |

Nearly 78% of the area has been brought under the plough. The district has only 2.12% under forest cover. Almost 1.36% or 4953 ha. of the area is under fallow land. Total irrigated area is 168248 ha in the district.

#### Objectives of F.D.A. (Long and short term)

- (1) To provide local employment opportunities specially to women, SC and landless labourers.
- (2) Security people's participation in planning and regeneration efforts to ensure sustainability:
- (3) Address the special problem of the area regarding its alkaline soil.
- (4) To fulfill the fuel need, fodder, small timber of village people living around the forest.
- (5) To improve the quality of life of the rural people through entry point programme which also includes plantation.
- (6) To create awareness among people to protect the forest area nearby.
- (7) To improve vegetative cover of the area.

#### **Project Components:-** These are important components of the project given below:

- (1) Aided Natural Regeneration
- (2) Pasture Development
- (3) Micro Planning
- (4) Extension and Promotion of J.F.M.Cs
- (5) People's Participation
- (6) Entry Point Activities
- (7) Monitoring and Evaluation

#### Any other Previous Project-

The district has not had any specific project. However, the social forestry programmes have been going on for some time in the district.

#### On-going Project-

The socio economic profile of 24 JFMCs/Villages showing number of households, total population, S.C. and O.B.C. component of the population number and category of live stock, land holding is given in Table No. 1.1 & 1.2. The total population is 56332 among. Schedule Caste population is 14420 and the population of OBC is 22531 in 24 JFMCs villages of the

project area in the district. The S.C. population accounts for 25.60 % while the OBC constitute 40% to the total population. Total number of families accounts for 8807. The total livestock population is 44924. Among this milch population (buffalo and cow) accounts for 28023 around 63 percent. The goat population is only 8.70 %. The fodder requirement per animal per day in kg is calculated for Buffalo, Cow and Goat which comes to 25 Kg., 15 Kg and 10 kg respectively. Fodder is not available in sufficient quantities. There is a big gap between demand and supply of fodder for the cattle. Degree of dependency on forest resources like fuel wood, fodder and timber is tremendous causing degradation of forest cover. New plantations under F.D.A. are helpful in avoiding soil degradation as well as in improving the forest cover.

Table:1.1 Socio-Economic People of JFMCs / Villages

|        | Name of villages                          |  |                               |  | Popula                                 | tion                        |   |  |
|--------|---|--|-------------------------------|--|--|-----------------------------|---|--|
| S.No.  | or<br>Range                               | s.c.   | O.B.C.                        | General  | Total                                  | Total No.<br>of<br>families | Total<br>Area                           | Total<br>Livestock<br>Population   |
| Anoop  | shahar                                    | Annual and the same and the sam | Addition to the second second | An and the second secon | ************************************** |                             |   | I  |
| 1      | Ahar                                      | 1064   | 2432                          | 4480   | 7976                                   | 1595                        | 689                                     | 3240   |
| 2      | Hasanpur                                  | 175  | 1368                          | 82   | 1625                                   | 416                         | 456                                     | 1092   |
| 3      | Chakla                                    | 480  | 975                           | 345  | 1800                                   | 104                         | 185                                     | 1325   |
| 4      | Navi Nagar (Maan Karawa)                  | 323  | 199                           | 358  | 880                                    | 118                         | 88                                      | 570  |
| 5      | Munispur                                  | 750  | 3665                          | 785  | 5200                                   | 900                         | 221                                     | 1000   |
| 6      | Mubarikpur                                | 8  | 646                           | -  | 654                                    | 80                          | 1303                                    | 395  |
| 7      | Badarkha                                  | 125  | 1135                          |  | 1260                                   | 700                         | 44                                      | 4801   |
| Bulanc | dsahar                                    |  | *                             |  |  |                             |   |  |
| 8      | Asawari                                   | 439  | 160                           | 912  | 1511                                   | 190                         | 55                                      | 974  |
| 9      | Domla                                     | 1500   | 2800                          | 200  | 4500                                   | 195                         | 76                                      | 2750   |
| 10     | Hirnot                                    | 475  | 200                           | 447  | 1122                                   | 185                         | 41                                      | 2400   |
| 11     | Khawajpur                                 | 76   | -                             | 2424   | 2500                                   | 350                         | 55                                      | 900  |
| 12     | Riwara                                    | 1305   | 900                           | 2709   | 4514                                   | 408                         | 219                                     | 4248   |
| 13     | Khakhuda                                  | 640  | 425                           | 870  | 1935                                   | 280                         | 84                                      | 1333   |
| Arniya | ' '                                       | /  | t                             | •  |  |                             |   |  |
| 14     | Bhogpur                                   | 318  | _                             | 760  | 1078                                   | 194                         | 252                                     | 913  |
| 15     | Magla                                     | 300  | 600                           | 100  | 1000                                   | 135                         | 83                                      | 675  |
| Debai  |   |  |                               |  |  |                             |   | *  |
| 16     | Ramghat                                   | 1002   | 1250                          | 998  | 3250                                   | 486                         | 151                                     | 1070   |
| 17     | Gokulpur                                  | 20   | 850                           | -  | 870                                    | 147                         | 516                                     | 825  |
| Khurja |   | -  |                               |  |  | -                           |   | -  |
| 18     | Bichola                                   | 735  | 175                           | 1520   | 2430                                   | 310                         | 90                                      | 825  |
| 19     | Ajambad                                   | 605  | 995                           | 176  | 1776                                   | 281                         | 95                                      | 515  |
| 20     | lkka Tajpur                               | 412  | 345                           | 775  | 1532                                   | 243                         | 75                                      | 525  |
| 21     | Ismailpur Budhena                         | 1320   | 40                            | 260  | 1620                                   | 200                         | 64                                      | 280  |
| 22     | Samaspur                                  | 551  | 1858                          | 95   | 2504                                   | 400                         | 91                                      | 825  |
| Syana  | han an a |  | <u> </u>                      | <del></del>  |  |                             | *************************************** | May and the second seco |
| 23     | Fakana                                    | 212  | 580                           | 685  | 1477                                   | 295                         | 40                                      | 673  |
| 24     | Sanota                                    | 1585   | 933                           | 400  | 2918                                   | 595                         | - *                                     | 3770   |
| -      | Total                                     | 14420  | 22531                         | 19381  | 56332                                  | 8807                        | 4894                                    | 44924  |

Source: D.F.O.Office Bulandshahr

#### Table1.2 Position of live stock population and fodder requirement in project area and sample JFMCs

| SI.<br>No. | JFMCs/<br>Site Name | Total<br>Livestock<br>Population | Buffalow | Cow  | Goat | Others | Total<br>Require<br>ment M.T. | Require-<br>ment of<br>fodder M.T. | Present availability of fodder M.T. | Gap in supply<br>and deman of<br>fodder<br>in M.T. |
|------------|---------------------|----------------------------------|----------|------|------|--------|-------------------------------|------------------------------------|-------------------------------------|--|
| 1          | Budhena             | 280                              | 225      | 25   | 30   | -      | 280.0                         | 940.80                             | 564.48                              | 376.32   |
| 2          | Bhogpur             | 913                              | 278      | 130  | 54   | 451    | 5200.0                        | 5200.00                            | 4377.0                              | 823.0  |
| 3          | Badarkha            | 4801                             | 3169     | 22   | 1610 | -      | 8761.80                       | 8761.80                            | 8805.0                              | 41.0   |
| 4          | Mamkarora           | 570                              | 450      | 70   | -    | 50     | 12.8                          | 12.08                              | 6.50                                | 6.30   |
|            | Total               | 6564                             | 4122     | 247  | 1694 | 501    | 14254.60                      | 14914.68                           | 13752.98                            | 1246.62  |
|            | Total of 24<br>JFMC | 44924                            | 24112    | 3911 | 8615 | 8263   | 75869.70                      | 75869.70                           | 108172.43                           | 32302.73   |

#### Salient Features

The strategy of the Project was to increase the forest tree cover by aided plantation in the gaps in the district. In addition to that soil moisture, conservation, Pasture Development will be done with the active support given by the community. In order to generate interest, entry point programmes will be carried out by the JFMC's/ VFCs. The employment opportunities were generated for the local people in plantation activities for Added Natural Regeneration and Entry Point Programmes for their benefits. It was ensured that local people will get fodder fuel and small timber from the forest area in JFMC's. The project area 978.50 hectares has been taken for afforestation work during 2004-05 to 2006-07. The main species grown were Prosopis Juliflora, Khair, Babool, Arjun, Kathsagaun, Eucalyptus, Papadi etc. in all 24 JFMC's in six ranges.

#### Creation of Joint Forest Management Committee & Development Funds

Under F.D.A. the role of Joint Forest Management Committees are very important in preparing micro plans, protection of forests from people and animals. Plantation in ANR, NR and Pasture lands, encouraging local people to participation in entry point programmes etc. In Bulandshahr district 24 JFMCs were constituted after holding meetings with all village people. The committee has a President, Member Secretary and seven other members. President shall be elected by the members and local forester as Member Secretary. The Bank account of each JFMC shall be jointly operated by the President and Member Secretary. Participation of women and SC members as member in the committee shall be taken care of in all JFMC's. JFMC meetings were held in every month.

#### Implementing Agencies: Composition and Constitution of F.D.A.

The scheme would be implemented by Forest Development Agencies (F.D.A.s) and Joint Forest Management Committees (J.F.M.C.s) FDA is a registered society under Societies Registration Act since 30 Dec.2000 and valid till 29 Dec.2005. The Bank account of F.D.A. is with Punjab National Bank Civil line Branch, Bulandshahar. The Bank Account Number is 0069000102394020 and Code No.0069. The Account is operated jointly with Chairperson (CF) and the Member Secretary (DFO).

The FDA shall release the amount earmarked for all JFMCs by demand draft within 15 days of receipt of funds from the NAEB. The respective JFMCs are deposited the funds received from FDA in their account opened in any Nationalized Bank/Co-operative Bank or a Post Office jointly operated by its Member Secretary (Forester) and concerned President of JFMC. The FDA is responsible for guidance, co-ordination, supervision, periodical reporting and monitoring the implementation of the project by their constituent JFMCs. The copy of Registration Certificate of the FDA Bulandshahr is given in Annexure-1.

#### Micro-Planning and JFMC

Each JFMC has prepared a Micro plan consisting of plantation programme and entry point programmes to create awareness among villagers according to their needs. All the assets created under EDP will be looked after by JFMC. In the district 24 JFMCs in 6 Ranges were constituted. The micro plans were prepared from 2004-05 to 2006-07. Each micro plan has information related to every aspect of the village. It has land use pattern, location, soil, population, cast wise breakup, main occupation, number of animals and their fodder requirement etc. Besides this information micro plan also includes entry point activities.

#### **Entry Point Activities**

Each JFMC village micro plan identified the activities to be taken during the project period. The most important work of JFMC is to improve vegetative cover area and protection of forest wealth. This is possible only when we take care of the interest of the local people. That is why entry point programme was associated with the FDA. The main activities done in Entry Point Activities were:-

- (1) Hand Pumps
- (2) Ponds
- (3) Yatri sheds

- (4) Funeral Sheds
- (5) Khadanja
- (6) Boundary Wall
- (7) Small canal/Kachcha Nala
- (8) Water and soil conservation
- (9) Others

It was thought that these activities will generate the interest of the villagers in protection of forest wealth and also improve the Socio-Economic condition of the people. Forty per cent of the budgetary provisions under the project is allocated to the Entry Point Activity.

#### Approved Programme of work

The table 1.3 shows that the total project area 978.50 hectare has been taken for afforestation works and gives the physical and financial targets achieved by the district during 2004-05 to 2006-07. The plantation works is distributed for a period of 4 years. Micro-Plans have indicated the treatable area to be taken by JFMCs. The area under ANR is 878.50 hectare and 100.0 hectare comes under Pasture Development. The expenditure incurred in the ANR head was Rs.56.28 lakhs and Rs. 7.38 lakhs on Pasture Development which is about 57 per cent of the total amount sanctioned. On Entry Point Activities Rs.25.39 lakh was given which is 23 per cent of the budget.

Table-1.3 Approved Programme of Work (2004-2005 to 2006-2007)

| Centrally Sponso                    | ,           | ne "Natio   | onal Aff |         |       |          |       |        |          |
|-------------------------------------|-------------|-------------|----------|---------|-------|----------|-------|--------|----------|
| District : Bula                     |             | _           | Б.       |         |       | r Prades |       |        |          |
| Approved Wa                         | age Rate: I | <del></del> |          |         |       | in Hecta |       |        |          |
| Item of Work                        | Rate Rs.    | 2004-2005   |          | 2005-06 |       | 2006-07  |       | Total  |          |
| non or row                          | Trato No.   | Phy         | Fin      | Phy     | Fin   | Phy      | Fin   | Phy    | Fin      |
| 1.ANR                               |             |             |          |         |       |          |       |        |          |
| Admissible Rate                     | 7540.00     | -           | -        | _       | -     | -        | -     |        | _        |
| a) Advance                          | 3100        | 8780.50     | 27.23    | -       | -     | -        |       | -      |          |
| b) Creation                         | 2000        | -           | -        | 878.50  | 17.57 |          |       | -      | -        |
| c) Maintenance                      | 1295        | -           | -        | _       | -     | 878.50   | 11.38 | 878.50 | 56.28    |
| SUB-TOTAL                           | 6395        | 878.50      | 27.23    | 878.50  | 17.57 | 878.50   | 11.38 | 878.50 | 56.28    |
| 2.Pasture/SP Devt.                  |             |             |          |         |       |          |       |        |          |
| Admissible Rate                     | 8584        | -           |          | _       | -     | -        | -     | -      | -        |
| a) Advance                          | 3500        | 100.00      | 3.50     | -       | -     | -        | -     | -      | <u>-</u> |
| b) Creation                         | 2500        | -           |          | 100.00  | 2.50  | -        | -     | -      | -        |
| c) Maintenance                      | 1384        | -           | _        | -       | -     | 100.00   | 1.38  | -      | -        |
| SUB-TOTAL                           | 7384        | 100.00      | 3.50     | 100.00  | 2.50  | 100.00   | 1.38  | 100.00 | 7.38     |
| 3.SMC (15%of plantation cost)       | _           | -           | 5.00     | -       | 2.53  | -        | 2.00  | -,     | 9.53     |
| 4.M&E, Microplan, Awarness (10%)    | -           | -           | 3.02     | -       | 1.88  | -        | 1.46  | 1      | 6.36     |
| 7.Overheads(10% of plantation cost) | -           | -           | 3.02     | -       | 1.88  | -        | 1.46  | -      | 6.36     |
| 6.EPA @Rs.                          | -           | -           | 12.00    | -       | 8.75  | -        | 4.64  | -      | 25.39    |
| 7.Improved Technology               | -           | -           | -        | -       | -     |          | -     |        |          |
| Total                               |             | 978.50      | 53.77    | 978.50  | 35.11 | 978.50   | 22.32 | 978.50 | 111.20   |

#### **CHAPTER II**

#### **QUANTITATIVE ANALYSIS AND FINDINGS**

In this chapter we will discuss the classification of area covered in the project as physical targets and achievements under different components of the project such as Added Natural Regeneration and Pasture Development, awareness programmes, training, type of assets created under Entry Point Programmes, capacity building, process adopted in the formation of JFMC.

#### B.1 Classification of Area Coverage/Treated

Table 2.1 shows that during three years about 86 per cent area was covered under forest land in the form of Added Natural Regeneration covering 838.50 hectare, 10 per cent (100 hectare) area developed as pasture land and 4 per cent (40 hectare) falls in other category. The programme started in 2004-05. In this year advance work was carried out in 978.50 hectare. During the next year plantation work was carried out on forest, other land particularly community land. During 2006-07 maintenance of the plant species performed. The main species of plants planted belong to Prosopis Juliflora, Babool, Sheesham, Neem etc.

Table-2.1: Classification of Area Coverage/Treated Programme Started 2004-05

| Category       | Added<br>Natural<br>Regener<br>ation | Artificial<br>Regener<br>ation | SP   | Bamboo<br>Plantation | Cane<br>Plant<br>Ation | Mixed<br>Plantation | MFP & trees of medical value | Pasture<br>Dev. | Total  | % of Total<br>Project<br>Area           |
|----------------|--------------------------------------|--------------------------------|------|----------------------|------------------------|---------------------|------------------------------|-----------------|--------|---|
|                |                                      |                                |      |                      | 2004-05(               | Advance work        | <b>(</b> )                   |                 |        | *************************************** |
| Forest Land    | 838.50                               | -                              | -    | -                    | -                      | -                   | -                            | 100.00          | 938.50 | 95.91                                   |
| Community Land | -                                    | -                              | -    | -                    | -                      | -                   | -                            | -               |        | -                                       |
| Revenue Land   | -                                    | -                              | -    | -                    | -                      | -                   | -                            | -               | -      | •                                       |
| Govt.Wasteland |                                      | -                              | -    | -                    | -                      |                     | -                            | -               | · ·    | -                                       |
| Private Land   | -                                    | -                              | -    | -                    | -                      |                     | -                            | -               | -      | -                                       |
| Others         | 40.00                                | -                              | -    | -                    | -                      | -                   | -                            | -               | 40.00  | 4.09                                    |
| Total          | 878.50                               | 0.00                           | 0.00 | 0.00                 | 0.00                   | 0.00                | 0.00                         | 100.00          | 978.50 | 100.00                                  |
|                | 2005-06(Creation)                    |                                |      |                      |                        |                     |                              |                 |        |   |
| Forest Land    | 838.50                               | -                              | -    | -                    | -                      | -                   | -                            | 100.00          | 938.50 | 95.91                                   |
| Community Land | -                                    | -                              | -    | -                    | -                      | -                   | -                            |                 | -      | -                                       |
| Revenue Land   | -                                    | -                              |      |                      | ~                      |                     |                              | -               | -      | -                                       |
| Govt.Wasteland | -                                    | -                              | -    | -                    | -                      | -                   | -                            |                 | -      | -                                       |
| Private Land   | -                                    | -                              | -    | -                    | -                      | -                   | •                            | -               |        | -                                       |
| Others         | 40.00                                | -                              | -    | -                    | -                      | <u>.</u>            | -                            | -               | 40.00  | 4.09                                    |
| Total          | 878.50                               | 0.00                           | 0.00 | 0.00                 | 0.00                   | 0.00                | 0.00                         | 100.00          | 978.50 | 100.00                                  |
|                |                                      |                                |      |                      | 2006-07                | (Maintenance)       | )                            |                 |        | -                                       |
| Forest Land    | 838.50                               | -                              | -    | -                    | -                      | -                   |                              | 100.00          | 938.50 | 95.91                                   |
| Community Land | -                                    | -                              | -    | -                    | -                      | -                   |                              |                 |        |   |
| Revenue Land   | -                                    | -                              | -    | -                    | -x <b>-</b>            | -                   | <b>-</b> ×                   | -               | -      | -                                       |
| Govt.Wasteland | -                                    | -                              | -    | -                    |                        | -                   | -                            | -               | _      |   |
| Private Land   | -                                    |                                | -    | <b>-</b>             | •                      | -                   |                              | •               | •      | -                                       |
| Others         | 40.00                                | -                              | -    | -                    | -                      | - 0                 | -                            | -               | 40.00  | 4.09                                    |
| Total          | 878.50                               | 0.00                           | 0.00 | 0.00                 | 0.00                   | 0.00                | 0.00                         | 100.00          | 978.50 | 100.00                                  |

#### **B.2** Physical and Financial Achievements

The table 2.2 (A) shows that physical and financial target of the project was achieved. The total area under Natural Regeneration and Pasture Development was 978.50 hectare. It was fully achieved in the first year (2004-05) of the project. The total expenditure on advance work was Rs.17.43 lakh which was 57 per cent of the financial target during the year. Expenditure on fencing work was Rs.0.74 lakh as against Rs.3.02 lakh. Soil and Moisture conservation and EPA work was not done during 2004-05. If we look at the table the total expenditure incurred was Rs.19.26 lakh as against Rs.53.77 lakh which was 36 per cent of the allocated fund during 2004-05.

During 2005-06 was the period of plantation on those lands where advance work was done. The amount of Rs.29.56 lakh were available for plantation work. In this year expenditure under EPA work acceded the amount which had been targeted. More than total allocated fund in this year was actually spent. In 2006-07 more attention was given to create assets in the rural area as decided in the JFMCs.

The total expenditure during the three year period was Rs.79.18 lakh as against Rs.111.20 lakh (71.20 per cent) on the plantation and EPA work in 24 JFMCs in the district.

Table-2.2 (A)
Physical and Financial Achievements (2004-05)

| SI   | 7                            | Physical (/         | Area in ha.)         | Financial           | (Rs.in lakh)        |
|------|------------------------------|---------------------|----------------------|---------------------|---------------------|
| No   | Item                         | Target for the year | Achieved in the year | Target for the year | Achieved in the yea |
| 1    | Natural Regeneration         |                     |                      |                     |                     |
|      | a) Advance Work              | 878.50              | 878.50               | 27.23               | 15.35               |
|      | b) Creation                  | -                   | -                    | -                   | -                   |
|      | c) Maintenance               | -                   | -                    | -                   | -                   |
|      | Sub Total                    | -                   | -                    | -                   | -                   |
| 2    | Pasture Development          | 100.00              | 100.00               | 3.50                | 2.08                |
|      | a) Advance Work              | ••                  | •                    | -                   | -                   |
|      | b) Creation                  | -                   | -                    | -                   | -                   |
|      | c) Maintenance               | -                   | -                    | -                   | -                   |
|      | Sub Total                    | _                   | -                    | -                   | _                   |
| 3    | Soil & Moisture Conservation |                     |                      | 5.00                | =                   |
| 4    | EPA                          | -                   | -                    | 12.00               | 4.17                |
| 5    | Micro Planning               | -                   | -                    | -                   |                     |
| 6    | Fencing                      |                     |                      | 3.02                | 0.74                |
| 7    | Monitoring & Evaluation      | -                   | -                    | - '                 | _                   |
| 8    | Improved Technologies        | -                   | _                    | -                   | -                   |
| 9    | Overheads                    | -                   | -                    | 3.02                | 1.00                |
| Tota | al                           | 978.50              | 978.50               | 53.77               | 19.17               |
|      | -                            |                     | Bank Charges         |                     | 0.09                |
|      |                              |                     |                      |                     | 19.26               |

Table-2.2 (B)
Physical and Financial Achievements (2005-06)

| SI    |                              | Physical            | (Area in ha.)        | Financ              | cial (Rs.in lakh)      |
|-------|------------------------------|---------------------|----------------------|---------------------|------------------------|
| No    | Item                         | Target for the year | Achieved in the year | Target for the year | Achieved in the year   |
| 1 N   | Natural Regeneration         |                     |                      |                     |                        |
| а     | a) Advance Work              | -                   | -                    | -                   | -                      |
| b     | o) Creation                  | 878.50              | 878.50               | 17.57               | 14.67+ 11.96=<br>26.63 |
| С     | c) Maintenance               | -                   | -                    | -                   | -                      |
| S     | Sub Total                    | 878.50              | 878.50               | 17.57               | 14.67+ 11.96=<br>26.63 |
| 2 F   | Pasture Development          | -                   | -                    | -                   | -                      |
| а     | a) Advance Work              | -                   | - ,                  | · -                 | -                      |
| b     | o) Creation                  | 100.00              | 100.00               | 2.50                | 1.80+1.13 =2.93        |
| C     | c) Maintenance               | -                   | -                    | -                   | -                      |
| S     | Sub Total                    | 100.00              | 100.00               | 2.50                | 1.80+1.13= 2.93        |
| 3 S   | Soil & Moisture Conservation |                     |                      | 2.53                | 4.69                   |
| 4 E   | EPA                          | -                   | -                    | 8.75                | 10.86                  |
| 5 N   | dicro Planning               | -                   | _                    | _                   | -                      |
| 6 F   | encing                       |                     |                      | 1.88                | 0.80                   |
| 7 1   | Monitoring & Evaluation      |                     | _                    | -                   | -                      |
| 8 1   | mproved Technologies         |                     |                      | _                   | -                      |
| 9 (   | Overheads                    | -                   | ••                   | 1.88                | .22+2.02= 2.24         |
| Total |                              | 978.50              | 978.50               | 35.11               | 48.15                  |
|       |                              |                     | Bank Charges         |                     | 0.18                   |
|       |                              |                     |                      | *                   | 48.33                  |

Table-2.2 (C)
Physical and Financial Achievements (2006-07)

|          |                              | Physical (A         | rea in ha.)          | Financial                 | (Rs.in lakh)         |
|----------|------------------------------|---------------------|----------------------|---------------------------|----------------------|
| SI<br>No | ltem                         | Target for the year | Achieved in the year | Target<br>for<br>the year | Achieved in the year |
| 1        | Natural Regeneration         |                     |                      |                           |                      |
|          | a) Advance Work              | -                   | -                    | -                         | -                    |
|          | b) Creation                  | _                   | -                    | -                         | -                    |
|          | c) Maintenance               | 878.50              | 878.50               | 11.38                     | Nill                 |
|          | Sub Total                    | 878.50              | 878.50               | 11.38                     | Nill                 |
| 2        | Pasture Development          |                     |                      |                           |                      |
|          | a) Advance Work              | -                   | -                    | -                         | _                    |
|          | b) Creation                  | -                   | -                    | -                         | _                    |
|          | c) Maintenance               | 100.00              | 100.00               | 1.38                      | 0.49                 |
|          | Sub Total                    | 100.00              | 100.00               | 1.38                      | 0.49                 |
| 3        | Soil & Moisture Conservation |                     |                      | 2.00                      | 1.02                 |
| 4        | EPA                          | -                   | -                    | 4.64                      | 6.68                 |
| 5        | Micro Planning               | -                   | -                    | -                         | -                    |
| 6        | Fencing                      |                     |                      | 1.46                      | 1.25                 |
| 7        | Monitoring & Evaluation      | -                   | -                    | -                         | -                    |
| 8        | Improved Technologies        | -                   | -                    | -                         | -                    |
| 9        | Overheads                    | -                   |                      | 1.46                      | 2.15                 |
| Tota     | al                           | 978.50              | 978.50               | 22.32                     | 11.59                |

Source: D.F.O.Office Bulandshahr

#### (1) Adequacy of the planting stock raise or available

Plantation activities were carried out in all 24 JFMCs. In 2004-05 the advance work was done. Next year important species were planted like Prosopis Juliflora, Babool, Khair, Kathsagaun, Eucalyptus, Arjun, Kachnar, Sirus, Sheesham, Papdi etc. The area cover by planting 215700 plants on 978.50 hectare. In the usar land of the area Prosopis Juliflora species is successful in plantation. Nurseries were developed in each rang office and plants were then distributed to the different plantation sites.

Table-2.3
Plantation under FDA-JFMC Range wise during 200405 to 2006-07

|                     |               | JFMC       |                         | Area ha                     |                               |                  |   |
|---------------------|---------------|------------|-------------------------|-----------------------------|-------------------------------|------------------|---|
| SI<br>No            | Range<br>Name | Name       | Plantation<br>Site Name | Pasture<br>Develop-<br>ment | Aided Natural<br>Regeneration | No. of<br>Plants | Species   |
| 1                   | 2             | 3          | 4                       | 5                           | 6                             | 7                | 8   |
| 1                   | ulandshahr    | thawajpur  | hawajpur forest block   | _                           | 35.00                         | 7000             | Prosopis Juliflora  |
|                     | ļ             | Riwara     | Riwara forest block     | -                           | 70.00                         | 14000            | Prosopis Juliflora  |
|                     |               | Domla      | omla forest block       | -                           | 20.00                         | 4000             | Prosopis Juliflora  |
|                     |               | Hirnot     | Hirnot forest block     |                             | 15.00                         | 3000             | Prosopis Juliflora  |
|                     |               | Asawari    | Asawari forest block    |                             | 40.00                         | 8000             | Prosopis Juliflora  |
|                     |               | Khakhunda  | Khakhunda forest block  |                             | 30.00                         | 6000             | Prosopis Juliflora  |
| 2                   | nupshahr      | Ahar       | Ahar forest block       | 30.00                       | 80.00                         | 28000            | Khair, Babool, Kathsagaun, Eucalyptus, Subabool, Arjun Khair, Babool, Kathsagaun, Eucalyptus, Subabool, |
|                     |               | Hasanpur   | Hasanpur forest block   | 30.00                       | 70.00                         | 26000            | Arjun   |
| #16 high a has sour |               | Mubarikpur | Mubarikpur forest block | 20.00                       | 45.00                         | 17000            | Khair, Babool,<br>Kathsagaun,<br>Eucalyptus, Subabool,<br>Arjun   |
|                     |               | Sirora     | Munishpur forest block  |                             | 45.00                         | 9000             | Khair, Babool,<br>Kathsagaun,<br>Eucalyptus, Subabool,<br>Arjun   |
|                     |               | Mankarora  | Navinagar forest block  |                             | 58.00                         | 11600            | Prosopis Juliflora  |
|                     |               | · Badrakha | Badarkha forest block   |                             | 25.00                         | 5000             | Prosopis Juliflora  |
|                     |               | Chakla     | Chakla forest block     |                             | 55.00                         | 11000            | Prosopis Juliflora  |
| 3                   | yana          | Sanouta    | PG Canal                |                             | 20.00                         | 4000             | Eucalyptus, Sheesham  |
| -                   |               | Fakana     | PG Canal                |                             | 20.00                         | 4000             | Eucalyptus, Sheesham  |
| 4                   | (hurja        | Ajamabad   | Ajamabad forest block   |                             | 2.00                          | 4000             | Prosopis Juliflora  |
| *****               |               | Samaspur   | Samaspur forest block   |                             | 20.00                         | 4000             | Prosopis Juliflora  |
|                     |               | Budhena    | Budhena forest block    |                             | 25.00                         | 5000             | Prosopis Juliflora  |
|                     |               | kk. Sikara | Sikara forest block     |                             | 20.00                         | 4000             | Prosopis Juliflora  |
|                     |               | Bichola    | Bichola forest block    |                             | 35.50                         | 7100             | Prosopis Juliflora  |
| 5                   | )ebai         | Gokulpur   | Ganfjuspur forest block | 20.00                       | -                             | 8000             | Kachnar, Sirus, Baboo<br>Subabool   |
|                     |               | Ramghat    | Ramghat forest block    |                             | 70.00                         | 14000            | Sheesham, Papdi,<br>Prosopis, Babool  |
| 6                   | ırnia         | Bhogpur    | Bhogpur forest block    |                             | 40.00                         | 8000             | Prosopis Juliflora  |
|                     |               | Nagal      | Nagal forest block      | 100.00                      | 20.00                         | 4000             | Prosopis Juliflora  |
|                     |               | Total      |                         | 100.00                      | 878.50                        | 215700           |   |

Source:D.F.O.Office Bulandshahr

#### An overview of sample JFMC

Bulandshahr district has 6 ranges and 24 JFMCs. We have randomly selected 3 ranges named Annopshahr, Kurja and Arniya. Among these ranges Maan Karaura, Badarkha, Ismailpur, Bedhena and Bhogpur JFMCs were selected for our survey work. The total area covered was 148 hectare. Out of 978.50 hectare which comes about 15 per cent of the total area under Natural

Regeneration. In order to calculate the survival rates of plants we picked different patches of plantations within each JFMC. Calculation was done from the peripheral as well as from deeper into the area. In this around four different locations were selected from each JFMC. The number of survivining plants was calculated on the total plants. Similar technique was adopted in all the 4 JFMC's covered by us. Survival rate is adversely affected by factors such as damage by wild animals, by white ants and also local people to some extent. Now we will be discussing four selected JFMCs as given in Table 2.4.

(1) Maan Karaura JFMC: Maan Karaura village is situated at a distance of 18 kilometers and 10 kilometers from district and range office respectively. The total geographical area is 205 hectare of which 46 per cent (94 hectare) falls under forest. Land coming under forest is sodic in nature. From the point of view of climate, it is dry and hot and temperatures touch 40° to 43° when summer is at its peak. Population is around 880 of which 43 per cent is female and 50% population belongs to OBC and SC. Arround 80 per cent population depends upon agriculture. Lack of proper irrigation facility and usar land are reasons of low productivity. Cattle population is 542, among this 96 per cent belongs to milch category.

The entire plantation work has been carried out on Added Natural Regeneration area. The area covered was 58 hectare. This JFMC comes under Anoopsahar forest range. The period of plantation was 2005-06. The village is surrounded by Badarkha, Raunda and Lahra villages. The benefits of forest of Maankaraura village shared by 2980 population of 4 (four) villages. They get fire wood, grass, grazing etc. from forest. The main species grown were Prosopis Juliflora and Babool. The average survival rate found to be 92 per cent. The main reasons of non survival of 8 per cent plant was animals and local people. This 8 per cent area where survival of plants was very adversely effected was mainly on the periphery of the forest. Overall health of the plants were found to be satisfactory.

kms from the district headquarter. The geographical area is 784 hectare. The area under forest is only 14 per cent (110 hectare) of the total land of the village. Cultivated land is 100 per cent irrigated. Nature of land is sodic. The temperature becomes 40° to 43° in summer. Climate is dry and hot. The village population is 1260. The OBC is the dominant caste and other is SC. The cattle population is 755 among this 509 are goats. The total area was 25 hectare and 5000 plants named Prosopis Juliflora and Babool were planted. The benefits of forest shared by four village named Maan Karaura, Navinagar, Dabkaura, Chatwari. They collect firewood, grass cuttings and

grazing in the forest area. The average survival rate is very high. It comes to 90 per cent. Finally, it can be said that in the two JFMCs of Anoopsahar range discussed above, plantation work was found very successful.

- (3) Ismailpur Budhena:- This JFMC is situated at a distance of 29 kms from the fistrict and range office is 9 km from the village. Plantation work was done in ANR scheme. The geographical area of village was 283.247 hectare. Its 29 per cent area comes under forest department. It is the interior village and reaching the site was very difficult. The main species planted were Posopis Juliflora and Babool. To irrigate the plants ponds and tubewell were used. Nature of land is very sodic. The problem of soil alkalinity is higher and survival rate of plant is only 72 per cent as against 90 to 92 per cent in sample JFMCs of Anoopshahr Range. Forest Guard is engaged to protect the plantation work done in the forest gaps. The reason of death of plant species were white ants, animals and people of village. Health of the plants were not very much satisfactory.
- (4) **Bhogpur JFMC:-** This JFMC is very far from the district about 43 kms. From the range office it stands 8 kms. The area covered is 40 hectare in NR. The geographical area of the village is 601.7829 hectare. Area under forest is 254.5406 hectare (42% of the total area). Nature of land is sodic. The temperature touch up 40° to 43° in summer season. According to micro plan data population of the village is 1078. The village is caste wise dominate by general caste (about 70%) and rest belong to SC. Agriculture is main activity. Others are engaged as milkmen and labourers.

Cattle population is around 400. The plantation work was done during 2005 in 40 hectare and the main species planted Kanji. Range office is 8 km far from the village. About 25.30% of plants did not survive. Total number of plants planted in 40 hectare was 8000. The reason are wild and village animals, Alcoholic chemical destroyed the plant etc. Survival rate of the plants to be calculated was 70 per cent. Health of the plants were not satisfactory. Height was below the average.

Table 2.4: Inventory of sample JFMCs(Plantation under Added Natural Regeneration)

| Name of<br>Range<br>and JFMC | Area<br>(Ha) | No. of<br>Plants | Survival<br>rate(%) | Distance<br>from Dist,<br>Range<br>office<br>and village | Name of<br>Species                | Name of beneficiries villages                 | Benefits to villagers                     | Population<br>of JFMC<br>villager |
|------------------------------|--------------|------------------|---------------------|--|-----------------------------------|---|---|-----------------------------------|
| Anoopsahar                   |              |                  |                     |  |                                   |   |   |                                   |
| 1.Maan<br>Karaura            | 58           | 11600            | 92                  | 18, 10, 5  | Prosopis                          | Badaricha,                                    | Firewood,<br>Grass                        | 800                               |
| JFMC                         |              |                  | , ý.                |  | Juliflora,<br>Babool              | Raunda,<br>Lahra                              | cutting, Wild animal                      | *                                 |
| 2. Badarkha<br>JFMC          | 25           | 5000             | 90                  | 22, 12, 8  | Prosopis<br>Juliflora,<br>Babool  | Maankaraura, Navinagar, Dabkaura,             | Firewood,<br>Grass<br>cutting,            | 1260                              |
|                              |              |                  |                     | ,  | Dabooi                            | Chatwai                                       | grazzing                                  | *                                 |
| Kurja                        |              |                  |                     |  | L                                 | Land - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -    | k   |                                   |
| Ismailpur<br>Budhena         | 25           | 5000             | 72                  | 29, 9, 1   | Prosopis<br>Juliflora,<br>Babool  | Budhena,<br>Sultanpur,<br>Samaspur,<br>Sikari | Firewood,<br>Grazzing                     | 1620                              |
| Arniya                       |              |                  | -                   |  |                                   |   |   |                                   |
| Bhogpur                      | 40           | 8000             | 70                  | 43, 8, 1.2   | Prosopis Juliflora, Babool, Kanji | Hisoti, Jarara,<br>Bhogpur                    | Firewood,<br>Grass<br>cutting,<br>Grazing | 1078                              |

#### **B.3** People's Participation

#### **B.3.1** Participatory Rural Appraisal / Micro-Planning

Micro plan was prepared for each JFMCs in detail in the district through the process of PRA. Before the implementation of the project 24 micro plans were prepared through the process of PRA. All range offices have the copies of micro plan of each JFMC falling within the range. It contains Area, population, land use, entry point activity, plantation programme, maps etc. A lump sum amount of Rs.3.02 lakh was spent in preparation of 24 micro plans during 2004-05.

#### **B.3.2** Entry Point Activities

In each of the micro plan Entry Point Activities to be undertaken in the JFMCs were identified after discussion with the villagers during the general body meeting. The main activities of Entry Point Programme in the district are as follow:-

- (1) Hand pumps
- (2) Ponds
- (3) Yatri Sheds
- (4) Funeral Sheds
- (5) Khadanja
- (6) Safety Boundary Wall
- (7) Small Cannal / kuchcha Nala
- (8) Water and soil conservation etc.

These activities have been identified according to the needs of the particular JFMC. A total amount of Rs.17.54 lakhs will be spent during 2005-06 and 2006-07 on the above activities. No expenditure was occurred on EPA activities during 2004-05. (see table 2.5) which is given below:

Table-2.5
Expenditure on EPA WORK

| SI. No. | Year of Expenditure | Expenditure (Rs.Lakh) |
|---------|---------------------|-----------------------|
| 1       | 2004-05             | Nil                   |
| . 2     | 2005-06             | 10.86                 |
| 3       | 2006-07             | 6.68                  |

Source: D.F.O.Office Bulandshahr

#### **B.3.3** Joint Forest Management

The constitution of JFMC ranges that there shall be President, Member Secretary and seven member constitute a JFMC. President is elected by the villagers is General Body and forester as Member Secretary. The committee looks after the plantation and EPA activities performed well with the co-operation of the villages. The JFMC registered under in the office of DFDA and conservator of Forest, Meerut circle.

#### JFMC Committees

Total number of committees 24

Total membership in terms of household/families 8807

Total No. of Beneficiaries 56332

The table 2.6 analyses the composition of beneficiaries according to Social Category. The table reveals that 26 per cent beneficiaries belongs to SC category. If we look at the percentage of women to total beneficiaries it comes to about 50 per cent.

Table-2.6

Social Composition of Beneficiaries

| docial composition of beneficialles |       |        |       |            |  |  |  |  |
|-------------------------------------|-------|--------|-------|------------|--|--|--|--|
| Social Category                     | Male  | Female | Total | Percentage |  |  |  |  |
| Scheduled Caste                     | 7410  | 7010   | 14420 | 26.0       |  |  |  |  |
| Scheduled Tribe                     | - 1   | -      | -     | -          |  |  |  |  |
| Others                              | 21542 | 20370  | 41912 | 74.0       |  |  |  |  |
| Total                               | 28952 | 27380  | 56332 | 100.00     |  |  |  |  |

Source: D.F.O.Office Bulandshahr

#### JFMCs/FDA Meetings

The details about the meeting held during 2004-05 to 2006-07 is given below:-

Table-2.7
Number of GBMs and EBMs Meeting of FDA held

| Mathbet of Obins and Ebins incenting of 1 by thole |         |         |  |  |  |  |  |  |  |
|--|---------|---------|--|--|--|--|--|--|--|
| EBMs & GBMs Held                                   | 2004-05 | 2005-06 |  |  |  |  |  |  |  |
| General Body                                       | 01      | 01      |  |  |  |  |  |  |  |
| Executive Body                                     | 01      | 01 .    |  |  |  |  |  |  |  |

Source:D.F.O.Office Bulandshahr

The above table shows that General Body and Executive Body of FDA has been held once in a year during 2004-05 and 2005-06. No meeting was called till now in this year. Regarding JFMC meetings it was told that they have been holding their Executive Body meetings monthly. General Body meetings of JFMC took place once or twice in a year.

#### Micro Planning

Micro Plans were prepared for all 24 JFMCs. We have been given micro plans of the sampled JFMCs. Every Range office has kept Micro plans of JFMCs under their range. All the documents, regarding FDA and JFMCs were available and maintained at village, range office and district.

#### **B.3.4** Capacity Building Programme:-

No training programme was conducted under capacity building for the staff of FDA and JFMC members.

#### **B.3.5** Monitoring and Evaluation

District forest officer inspected range offices and their JFMCs regarding progress of the FDA Programmes such as plantation work and EPA activities several times. It is told that he visited almost every JFMC. The funds available on monitoring and evaluation, Micro plan was 6.36 lakhs during 2004-05 to 2006-07.

#### **CHAPTER III**

#### FDA MECHANISM

National Afforestation Programme implemented through a two tier decentralized mechanism of FDA at the forest division level and JFMC at the grass root level village. In this chapter we have discussed the FDA mechanism and its structure, strength and weakness and some other issues related to it.

(1) Outline the constitution of FDA i.e. composition of general and executive bodies, along with deviations, if any, reason therefore and concurrence of MOEF there to.

FDA are to be registered as Federation of all Joint Forest Management committees within a territorial/wildlife forest divisions under the Societies Registration Act. FDA Bulanshahr was registered under Societies Registration Act of 1860 on 30<sup>th</sup> Dec.2000 and valid upto 29 Dec.2005. According to the rules the General Body will meet at least one in a year, while the executive body will meet at least once in three months. There was no deviation regarding the General Body meeting. They meet once in a year. Executive body could not meet more than once.

The structure of General Body and Executive Body as follows:

General Body:- Chairperson-Conservator of forest, Members-Presidents of JFMCs not more than 50, Range Forest officers, ACFs/SDFO and one non-official representative to nominated by the apex institutional frame work of Panchayats.

Executive Body:-Chairperson conservator of forest, member secretary-Divisional Forest Officer, Members-Ex-office Members, DDO, District level officer of Agriculture, Rural Development, Animal Husbandry, Health, Education, Instries, soil conservation etc., ADM to be nominated by DM, on non-official representation, Fifteen nominees from the JFMCs to include minimum of 7 women.

The members of the General Body and Executive Body attend the meeting when ever it called. FDA is a centrally sponsored scheme and has funds for plantation with maintenance cost, soil and moisture conservation activities micro planning, fencing, awareness etc. for five year of period. Once funds are released to FDA it is further released to JFMC within 15 days. The funds received by the FDA Bulandshahr are being deposited in Punjab National Bank. The account is jointly operated by chairman/CF and Member Secretary / DCF. Funds and accounts records were well maintained. The progress report of the work carried out by JFMC submitted quarterly to the DFO through range office. The system is well linked top to bottom .

### (2) Highlight the strengths and weakness, if any pertaining to mutual responsibilities assigned to FDA

#### Strengths:

- (i) Increased pasture land will enable people to fulfill their requirements from the forest such as fodder and fuel wood etc.
- (ii) Plantation carried out under ANR will improve forest cover and also help in soil conservation.
- (iii) The people have become aware about the importance of forests and so are concerned about its protection.
- (iv) It has created employment opportunities through plantation and entry point activities in the JFMC villages.
- (v) Assets creation in Entry point Programme has increased interest of the people in forest protection.
- (vi) The forest department has been receiving greater co-operation from the people than earlier in every respect.

#### Weakness:

- (i) Even after introducing the EPA programme the co-operation which was required from the community was not much encouraging.
- (ii) The wage rates prescribed of Rs.58/- has not been revised. The current wage rate is Rs.80 to Rs.100 in the area.
- (iii) There is no provision of cattle guard in FDA. However, JFMC, manage funds within the given amount and engage cattle guard for protection of plantation from animals and village people.
- (iv) Capacity building programme to provide training to forest staff and JFMC members for better understanding about the programme has not been provided.
- (v) Another area of weakness is maintenance of assets created under EPA.
- (3) Comment on whether the project implementing VFCs/EDCs are also being benefited through any other forestry/community development project from state/central government.

The social forestry programme were launched pervious and people were benefited from this programme as reported by the JFMC, members.

(4) Provide the brief outline of FDA bank account, its mode of operation, auditing status supported with progress of work as envisaged in the guidelines. Comment on the flow of funds to JFMC. Disbursement of funds by JFMCs for work executed. If delayed: reasons there of?

The Bank account of FDA was with Punjab National Bank civil lines Branch, Bulandshahr. The bank account number is 0069000102394020 and code no 0069. The audit report of two years (2004-05 and 2005-06).

#### **CHAPTER IV**

#### **QUALITATIVE ANALYSIS AND FINDINGS**

This chapter deals with the analysis and findings of the evaluation study especially in qualitative terms. It includes assessment of plantation, survival rate, increase and availability of fuel wood, fodder etc. Peoples participation, protection and maintenance of assets created, maintenance of records, benefits accrued to the community etc.

#### (1) Assessment of plantation

#### (i) Brief comment on the suitability of area selected for project implementation.

The plantation work was carried out on the forest land. The area under project belongs to the reserve forest and area under Pasture Development. Forest of the district are of degraded type i.e. either alkaline or Khadar some alluvial land is under agriculture. All reserve forest in Khurj, Arniya, Bulandshahr and part of Anoopshahr ranges are saline alkaline soils. The extent of PH varies from 8 to 11. Khadar areas are low lying pieces of land lying along Ganga river. The area selected in the project was 878.5 hectare in NR and 100 hectare of Pasture Development. The area selected for the plantation purpose in the project was suitable.

## (ii) Assessment of work as seen in the field including quality of work and survival rate of plant species.

We have surveyed four JFMC i.e., Budhena, Bhogpur, Budarkha and Maan Karora from three ranges. The total area covered during the visit was 148 hectare. The Prosopis, Juliflora species is planted because it suited to the dry usar land. After plantation in the area soil has also improved as was told by the officials. In the year 2005-06 number of plants planted were 29600. In order to calculate the survival rates of the plant we picked different patches of plantation. The area selected in the forest was from the periphery as well as deeper into the area. It was found that the average rate of plants survival was 81 per cent calculated to combined four selected JFMCs. Higher survival rate (90%) found in Maan karora JFMC. The main plant planted in sample JFMCs was Prosopis, Juliflora. The average height of the plant varied from 4 to 10 feet. But in some plots it was found to be 2 to 3 feet which was not satisfactory growth. The health of the plants was very good in Badarkha and Mankarora JFMCs but in other two JFMCs it found average (see table 4.1)

Table-4.1 Inventory of sample JFMCs

| SI<br>No. | Scheme | VFS/Site<br>Name | Area<br>(Ha) | No.of plants | Survival<br>Rate % | Species             | Plantation<br>Year |
|-----------|--------|------------------|--------------|--------------|--------------------|---------------------|--------------------|
| 1         | ANR    | Budhena          | 25           | 5000         | 72                 | Prosopis, Juliflora | 2005-2006          |
| 2         | ANR    | Bhogpur          | 40           | 8000         | 70                 | Prosopis,Juliflora  | 2005-2006          |
| 3         | ANR    | Badarkha         | 25           | 5000         | 90                 | Prosopis, Juliflora | 2005-2006          |
| 4         | ANR    | Mankarora        | 58           | 11600        | 92                 | Prosopis,Juliflora  | 2005-2006          |
|           | Total  |                  | 148          | 29600        | 81                 |                     |                    |

Keeping in mind the sodic nature of the land the only plant which could be successfully planted has been Prosopis Juliflora. As a result the intensity of soil erosion has declined and also there is some improvement regarding the level of alkalinity of the soil.

#### (iii) Technology used in the project

To improve the forest area and to strengethen the forest cover, added natural regeneration was under taken on 878.50 hectare similarly to provide benefits to the local community Pasture Development activities were under taker over an area of 100 hectare. Since the soil is rocky in nature machines had to be used, instead of manual labour for preparing the area for plantation.

#### (iv) Increase in availability of biomass:

As far as increase in availability of biomass is concerned it was found that some improvement were certainly visible in areas where soil was of better quality and some irrigation available. However since these plantation are barely two years old the actual effect on the biomass will be visible after a few years.

#### (v) Improvement in quality of life of people in the project area

It was very difficult to measure the change in the quality of life after the FDA Programme was launched. Regarding the education, health, drinking water the area is already developed therefore people have not given any answer to the question. The table 4.2 clearly indicates that in the year 2004-05 man days was generated 11703. In the second year main work of EPA was started therefore it was more than doubled 30737. There was not much work left except maintenance works mandays generated came down to 3103 in 2006-07. The total man days generated in the project was 45543 (see table 4.2)

Table-4.2 Man Days Generated in the Project

| Year    | Man days generated |  |  |  |  |
|---------|--------------------|--|--|--|--|
| 2004-05 | 11703              |  |  |  |  |
| 2005-06 | 30737              |  |  |  |  |
| 2006-07 | 3103               |  |  |  |  |

Source: D.F.O.Office Bulandshahr

#### (vi) People's Participation

### (i) Whether the choice of species has been decided in consultation with the local people. Also comment briefly whether these are in consonance with the local needs.

Before selection of plant species soil testing was done and then moisture and climatic conditions of the area were taken into account. In the case of our sample JFMCs mainly Prosopis Juliflora species planted in the forest area. Limited plantation did for Babool species. Some JFMC tried to plant some other species like Khair and Sheesham in the Khadar area of Ganga because of sandy soil.

## (ii) Briefly comment on the suitability of species taken up for NTFP and medicinal plants from economic point of view.

Medicinal plants were not grown in the area because the nature of soil is sodic. The other species grown in the area were used as fuel, fodder and timber etc. This is the only benefit to the local people from the forest.

## (iii) Whether the project has created awareness among the local population about the responsibility they are expected to discharge and the benefits that are likely to accrue from the project.

To create awareness among the local population pamphlets were distributed, people had been assembled by JFMC to talk about the plantation and entry point actives run by the FDA. In spite of these efforts the co-operation from the people was not adequate.

Secondly local people acquired the fuel, fodder, grass from the forest area and also benefited as a result of the assets created under entry point activities like Hand Pump, Ponds, Passenger sheds, Funeral shed, Khadanja etc.

#### (iv) Approach adopted by the project authorities for motivating the public?

The forest officials motivated people by organizing meetings, awareness campaigns and by distributing pamphlets among villager about the activities. However, the officials need to pay greater more attention in this area for achieving desired results.

(v) Whether the means of communication adopted have been successful and have there been favorable responses?

The approaches to create awareness among the local community was not very successful therefore the active participation of the people which was required in the programme at all levels was found to be lacking. Now there is a need to involve people to a greater extent to give more success to the FDA Programme.

- (vi) Whether the village community has been involved in:
- (a) Project Planning

Yes

(b) Project implementation

Yes

(c) Usufruct sharing mechanism

Yes

(d) Are the people aware of the G.O. issued (if any) with regard to JFM/usufruct sharing mechanisms?

No

(e) Has any formal arrangement been evolved for sharing the intermediate and final produce of the project activities?

No

(f) Evaluation and comments on the effectiveness of the mechanism involved and equitableness of the same.

N.A.

(g) What role has been played by the local community/committee in arriving at the mechanism?

No role

- (vi) Maintenance of Records
- (a) Whether record of nurseries indicating the number and spices of seedling raised has been maintained?

Yes, the records were maintained regarding number of plants, name of spices etc.

(b) Whether these are adequate and posted time to time. If not the reasons for not posting of these records and effect of unposted records on the implementation of project.

Yes

(c) Whether plantation journals have been maintained and posted up to date. Whether a surveyed sketch of the plantation has been posted on the register.

Yes

(d) Whether inspecting officials of the implementing department like DFO, CF or CCF have recorded there observation / comments, if any

Yes, whenever DFO visited the range office he recorded his observation.

(e) Whether record / register of JFMCs General Body and Executive Body meetings maintained?

Yes

#### (VII) Asset creation, maintenance and project benefits?

Maintenance of plantation area of the forest is very difficult task because there is no provision of cattle guard in the FDA. Generally JFMCs, appointed cattle guard on an ad hoc basis and managed their payments from the allocated funds. Maintenance of assets created under EPA should be taken care by JFMCs. It needs much attention. Table 4.3 describes the work done by sample JFMCs. In EPA programme main activities done were as follows: Hand pumps, Ponds, Yatri sheds, Funeral sheds, Khandanja etc. The quality of work and measurement of the assets has been given below:

Table 4.3 Work done by JFMC

|                                 | Name of JFMCs |    |         |   |                      |    |                | Measurement |                     |                           |                  |                           |
|---------------------------------|---------------|----|---------|---|----------------------|----|----------------|-------------|---------------------|---------------------------|------------------|---------------------------|
| Name of                         | 1             |    | 2       |   | 3                    |    | 4              |             | 1                   | 2                         | 3                | 4                         |
| Activities                      | Badarkha      |    | Bhogpur |   | Esmailpur<br>Budhena |    | Maan<br>Karora |             |                     |                           |                  |                           |
| 1.Hand pump                     | V             | B⁺ | V       | В |                      | B⁺ | V              | B⁺          | 1                   | 1                         | 1                | 1                         |
| 2. Ponds (M.)                   | _             | -  | V       | В | V                    | B⁺ | v              | А           | -                   | 14 x 12 x<br>1.50         | 16x 17 x<br>1.50 | 30.75x 25.5 x<br>1.50 fit |
| 3. Passenger shed               | -             | -  | -       | - | -                    | -  | -              | -           | -                   | -                         | -                | 3 x 5x 9 fit              |
| 4. Funeral Shed                 | -             | -  | -       | - | ٧                    | В  | -              | -           | -                   | -                         | 1x 3 x 18<br>fit | -                         |
| 5. Plantation (Hect)            | V             | Α  | ٧       | В | ٧                    | B⁺ | ٧              | Α           | 25                  | 40                        | 25               | 58                        |
| 6. Khadanja (Meter)             | ٧             | B⁺ | -       | - | -                    | -  | -              | B⁺          | 12                  | -                         | -                | 23.12                     |
| 7. Safety Boundary              | -             | -  | -       | - | ٧                    | В  | -              | -           | -                   | -                         | 380 m.           | -                         |
| 8. Small cannal<br>Kachcha Nala | -             | _  | ٧       | O | -                    | -  | -              | -           | -                   | 1200<br>x 1.20<br>x 90 m. | -                |                           |
| 9. Water and soil conservation  | ٧             | В  | -       | - | -                    | -  | V              | B⁺          | 17x 16x<br>2.50 fit | -                         | -                | 17.50x 16 x<br>1.50       |

The project has generated a total of 45543 man days during 2004-05 to 2006-07.

#### **Project Reporting Activities**

(a) What returns (reports) has been submitted by the implementing agency to state/central govt. Whether these reports were sent regularly on due date. If not, the reasons therefore.

The audited statement of 2004-05 and 2005-06 were submitted to the conservator forest office and from there forwarded to the state / central government.

(b) Whether any state level agency has monitored project activities. If so the outcome of such monitoring / evaluations and comments.

The DFO office informed the monitoring work was conducted by some agency from New Delhi. Details were not provided.

(c) If no agency evaluated project activities, reasons therefore.

N.A.

#### CHAPTER V

#### PROJECT CONSTRAINTS AND LIMITATIONS

Every development programme has faced some difficulties at the time of implementation. FDA has also come across a number of constrains during the time of its progress. Some of these are given below.

#### (a) What constraints / limitations were faced by the project authorities, if any?

- (i) People of the community in some of the JFMC, were not co-operative. They never come to attend JFMC meetings.
- (ii) Community is not well aware about the programme such as plantation work in ANR area, EPA work.
- (iii) It was found that local workforce was deprived of employment in some of the JFMCs. It defeats the main objective of the FDA.
- (iv) It is very difficult to protect-forest plantations from cattles and wild animals.
- (v) The norms of the labour charges fixed is Rs.58 but the prevailing rate in the area is Rs.80 to Rs.100. It is difficult to manage but somehow they overcome this problem.

#### (b) Whether the fund flow was smooth and without delays.

Funds has no problem in FDA. There is enough fund. Therefore, officials released fund to the JFMC account on a timely basis.

(c) If flows was not smooth, where did the delay arise? This must be checked with records?

N.A.

#### (d) Whether the project authorities made adequate efforts to get funds released in time.

DFO keeps in touch with the high officials at every level to release funds on time to avoid any hardship for the FDA Project.

#### **CHAPTER VI**

#### SUGGESTIONS AND RECOMMENDATIONS

Whether there is any scope for improving the project output.

- (i) The rates should be revised in connection with the creation and maintenance in ANR and pasture development.
- (ii) Cattle guard is an urgent need to protect forest area form destruction by animals and local people.
- (iii) Wage Rates of Rs.58% must be increased upto at least Rs. 80/-. Present Rates in the area is Rs. 80 to 100.
- (iv) Since capacity building is an important aspect it should have been given due importance in the project. No training programme were organized in the district.
- (v) Despite the fact that awareness creation was attempted through holding village level meeting and through distribution of pamphlets the actual impact on the people has not been very satisfactory. In future greater efforts are desirable.

#### Name and Designation of functionaries with whom evaluator has interacted.

DFO - Mr.Ashok Kumar

Anoopshahr Range - Mr.Jagveer Singh (Forest Ranger)

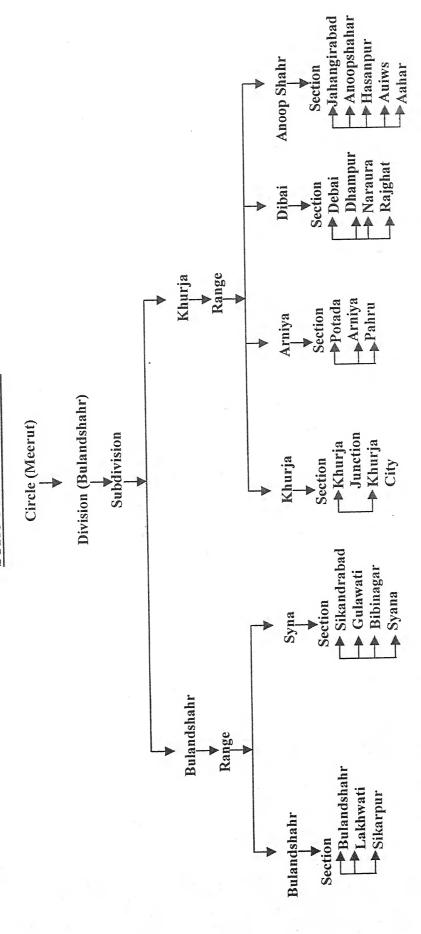
Khurja & Arniya Range - Mr.Radhey Shyam (Forest Ranger)

We interacted with DFO Bulandshahr Mr.Ashok Kumar and his colleagues i.e. Rangers and other administrative staff and held discussions regarding the work done in the district. The DFO was satisfied with the progress of the work and also pointed out some of the shortcomings particularly related to the budgetary accept of the project. He was of the opinion that the approved rates need an upward revision keeping in mind the fact that the provisions under Social Forestry for the same activity is much higher. He too expressed the view that people's cooperation is difficult to ensure partly because they are illiterate and also because of an indifferent attitude toward extending their co-operation.

Finally I wish to record my sincere thanks to Mr. Ashok Kumar DFO Bulandshahr and his entire team at the head office and the three ranges visited by us for their kind co-operation which facilitated the writing of this report.

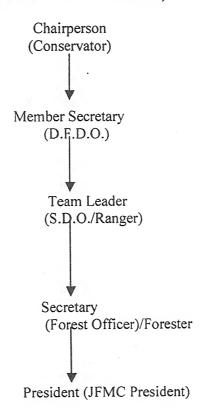
Annexure 1

# STRUCTURE OF F.D.A.



#### Annexure-2

#### (Structure of F.D.A. Staff)





## सोसाइटी-रंजिस्ट्रीकरण का प्रमाण-पत्र

## (अधिनियम संख्या 21,1860 के अधीन)

एतद्द्वारा प्रमाणित किया जाता है कि मारेस्ट डेललपानेन्ट एउन्ही, पता- क्नामिन्युमाभीम निदेशक, सान्वान २०.

को आज उत्तर प्रदेश में अपनी प्रवृत्ति के संबंध में यथासंशोधित सोसाइटीज रिजस्ट्रेशन अधिनियम, 1860 ई० के अधीन सम्यक् रूप से रिजस्ट्रीकृत किया गया है। यह प्रमाण-पत्र

आज विनाक ती हा दिहा ग्राह्म हो हजार

भू हर्ड रहर है। सांसाइटी के रिजस्ट्रार, उत्तर प्रदेश्

देल्लान पुरुवीर एक्पीन विभव विभव विभव विभव विभाव विभाव विभाव (विभाव विभव विभाव विभाव